

REMARKS

Upon entry of the present amendment, Amendment-A, claims 1-16 remain pending in the present application, of which claims 1 and 14 are independent claims.

The above-identified Office Action has been reviewed, the applied reference carefully considered, and the Examiner's comments carefully weighed. In view thereof, the present Amendment-A is submitted. It is contended that by the present amendment, all bases of rejection set forth in the Office Action have been traversed and overcome. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

In the claims, claims 1, 14 and 15 have been amended to further, better define the present invention over the art of record.

Claim 1 has been amended herein to further define that a drive shaft support structure for a marine propulsion machine comprises a vertical drive shaft, and a gear case provided with a vertical drive shaft receiving bore receiving said drive shaft in a bearing fixedly held in the drive shaft receiving bore and a bevel gear mechanism for transmitting power of a drive shaft to a propeller shaft, said gear chamber storing therein a lubricating oil, said drive shaft support structure further includes a covering member having a body part penetrated by the drive shaft and a downwardly projecting part projecting downward from the body part, said downwardly projecting part being closely fitted in said upper end of the drive shaft receiving bore and having an oil passage forming a part of a lubricating oil flow path which extends from said gear chamber through said drive shaft receiving bore to a space between the bearing-fastening member and the covering member and from said space to an outside of the drive shaft receiving bore through a connecting hole for conducting the lubricating oil to the outside.

Claim 14 have been amended similarly to claim 1.

Claim 15 is amended by deleting reference to a bearing fastening ring of the bearing-fastening member.

Applicant respectfully submits that the above amendments are fully supported by the original disclosure, including the drawings, with particular reference to Figs. 3, 10 and 11 and the discussion of same. For example, it is disclosed (in relation to the present example) that : covering member (40) is disposed above the bearing-fastening member (38) and closes an upper end of the drive shaft receiving bore (15b) in a liquid-tight fashion; the covering member (40) has a body part (40a) penetrated by the drive shaft (21) and a downwardly projecting part (40c) projecting downward from the body part (40a), the downwardly projecting part (40c) being closely fitted in the upper end of the drive shaft receiving bore (15b) and having an oil passage (40c2) forming a part of a lubricating oil flow path which extends from the gear chamber (15a) through the drive shaft receiving bore (15b) to a space between the bearing-fastening member (38) and the covering member (40) and from the space to an outside of the drive shaft receiving bore (15b) through a connecting hole (15i) for conducting the lubricating oil to the outside.

Applicant also respectfully submits that no new matter is introduced into the application by the above amendments.

Claim Rejections - 35 USC §102 (b)

In Section 2 of the above-identified Office Action, the Examiner rejected claims 1, 12, 14 and 16 under 35 USC §102(b) as anticipated by Onoue (US 4,917,639).

Applicant's Response:

Upon careful consideration and in light of the above amendments, applicant respectfully

submits that claims 1, 12, 14 and 16 are patentably distinct over the Onoue reference for several reasons.

For example, Onoue reference never discloses that the bearing is substantially vertically fixed in the drive shaft receiving the bore. Rather, the reference provides a structure to prevent brushing within the water pump which is disposed above the lower unit casing 44 from slipping upwardly with the drive shaft 35 when shaft moves upwardly (col. 4, lines 27-43); and the reference discusses that downward thrust on the drive shaft normally do not occur (col. 3, lines 54-56).

Further, Onoue does not disclose a covering member as defined which completely closes the upper end of the drive shaft receiving bore.

Moreover, Onoue does not disclose or suggest a covering member including a downwardly projecting part having an oil passage forming part of a lubricating oil flow path as now defined.

Such covering member according to the present invention is very advantageous, as may be understood with reference to present, non-limiting embodiment of the present invention. For example, as shown in Figures 3 and 11, lubricating oil is stored in the gear chamber (15a) and is pumped upwardly through the interior of the drive shaft receiving bore (15b) to a space between the bearing-fastening member (38). Thus, lubrication of the bearing (37) is carried out. The lubricating oil must then be supplied for lubrication to another portion outside the drive shaft receiving bore (15b). A connecting hole (15i) is used to conduct the lubricating oil within the drive shaft receiving bore (15b) to that other portion, typically a shift rod receiving bore (15d). However, the connecting hole (15i) must be formed at the upper portion of the drive shaft receiving bore (15b) where the bearing (37) for the drive shaft (21) is positioned.

Furthermore, the lubricating oil that has carried out lubrication of the bearing (37) necessarily reaches the upper portion of the drive shaft receiving bore (15b) so that the connecting hole (15i) for conducting the lubricating hole to the outside must be positioned in the upper portion of the drive shaft receiving bore (15b). When the cylindrical part (40c) of the covering member (40) disposed above the bearing-fastening member (38) is fitted in the upper end of the drive shaft receiving bore (15b) to close the upper end, the cylindrical part (40c) will cover the connecting hole (15i) and prevent the lubricating oil in the drive shaft receiving bore (15b) from flowing into the connecting hole (15i). This can be avoided by forming the oil passage (40c2) (Fig.10) in the cylindrical part (40c).

Thus, the connecting hole (15i) will not be even partly closed even if the covering member (40) is disposed at the lowest possible position and the lubricating oil flow path is secured which extends from within the gear chamber (15a) through the drive shaft receiving bore (15b) to a space between the bearing-fastening member (38) and the covering member (40) and then from the space to the outside of the drive shaft receiving bore (15b) through the connecting hole (15i). This advantageous feature of the invention is not suggested at all by anyone of the references mentioned above.

In prior art references, a covering member corresponding to the covering member used in the present invention was provided on the top mounting surface of the gear case so as to form a bottom member of a water pump case located above the drive shaft receiving bore. In the claimed invention, the covering member is closely fitted in the upper end of the drive shaft receiving bore in such a manner that the covering member is entirely located in the gear case below the top mounting surface of the gear case. Such arrangement of the covering member makes it possible to reduce the height of the water pump with the result that a forward extending

wall of the extension case can be formed at a level below the lower end of the swivel shaft 6 (see specification, page 17, second paragraph).

For all of the foregoing reasons, applicant requests consideration and withdrawal of the rejection of claims 1, 12, 14 and 16 under USC § 102(b).

Allowable Subject Matter

In Section 3 of the above-identified Office Action, the Examiner objected claims 2-11, 13 and 15 as being dependent upon a rejected base claim, but indicates that these claims would be allowable in written in independent form including all of the limitations of the base claims and any intervening claims.

Applicant gratefully acknowledges the Examiner's indication of allowability, and independent claims 1 and 14 have been amended in a manner which is believed to clearly distinguish over all of the references of record.

Other Matters

Applicant has recently submitted, on June 24, 2005, a new Information Disclosure Statement (IDS) identifying two references (US 4,650,428 to Bland et al. and US 4,820,211 to Onoue) and a copy of a recent Office Action from the European Patent Office for a European patent application corresponding to the present application. Upon careful review of the references disclosed in the submitted IDS, applicant further respectfully submits that all of the present claims are patentably distinct over these references, whether considered singly or in combination with each other and/or with the other references of record.

Conclusion

In conclusion, applicant has overcome the Examiner's rejections as presented in the Office Action; and moreover, applicant has considered all of the references of record, and it is respectfully submitted that the invention as defined by each of the present claims is patentably distinct thereover.

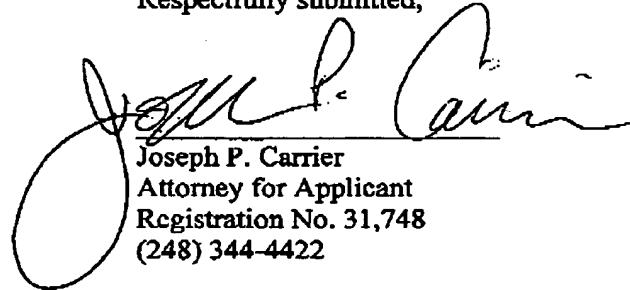
Applicant respectfully submits that all of the above amendments are fully supported by the original application. Applicant also respectfully submits that the above amendments do not introduce any new matter into the application.

The application is now believed to be in condition for allowance, and a notice to this effect is earnestly solicited.

If the Examiner is not fully convinced of all of the claims now in the application, applicant respectfully requests that he telephonically contact applicant's undersigned representative to expeditiously resolve prosecution of the application.

Favorable reconsideration is respectfully requested.

Respectfully submitted,

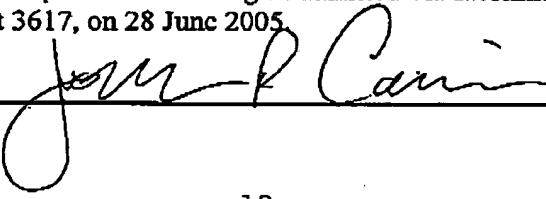


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